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Simulations for the Discipline Specific and Professional Education of Foreign Policy Graduates

Maryanne Kelton Flinders University, maryanne.kelton@flinders.edu.au

Verity Kingsmill
Flinders University, verity.kingsmill@flinders.edu.au

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Simulations for the Discipline Specific and Professional Education of Foreign Policy Graduates

Abstract

Increasingly universities aim to provide students with opportunities to graduate with skills ready to perform in the workplace. However, workplace-based opportunities for students enrolled in foreign policy subjects are more limited due to the diplomatic and sensitive political nature of the professional work. Thus there exists a need for higher education institutions teaching foreign policy courses in generalist degrees to create innovative solutions to enable student experience of professional foreign policy practice. In this article we analyse our Australian foreign policy dual strategy teaching initiative where we deploy in-person simulations enabling students to develop both their discipline specific foreign policy knowledge and gain insights in, and experience with, professional competencies and non-technical skills. Student, industry, and staff participant feedback demonstrates the benefits of the simulations for both discipline specific learning and professional skills development.

Keywords

In-person simulation, foreign policy, professional competencies, work integrated learning, employability

Cover Page Footnote

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Introduction

This article analyses a dual-strategy approach in the teaching of Australian foreign policy to second- and third-year undergraduates. The strategy aimed to enhance the learning and application of foreign-policy knowledge, together with the provision of insights and development of the skills comprising a professional competency. Situating an active-learning simulation model within the Australian foreign-policy curriculum provided the opportunity for students to participate in work-integrated learning experiences in a non-professional, generalist international-studies or arts degree. It marked an endeavour to provide simulated workplace experiences together with industry involvement in a sector where its diplomatic, sensitive and politicised nature limits the number of workplace opportunities. This article provides four key features: a rationale for the use of in-person simulations in foreign-policy learning; the presentation of our dual-strategy simulations within the curriculum; evaluations that review the benefits of the approach for both discipline-specific and skill learning; and our insights into the challenges and learning associated with these experiences. In providing these insights, we aim to add to the literature that examines the dual-purpose, discipline-specific and skill-learning approach in a generalist degree.

The dual purpose: enhance discipline-specific learning and workplace competency

The foreign-policy simulation teaching initiative incorporated two aims: to enhance the learning and application of students' discipline-specific foreign-policy knowledge, and to promote the development of students' professional competencies and specific skills within a disciplinary context. Integral to our simulations was the involvement of industry expert assistance in each of the simulations. This provided an alternative to locating our students in the workspace and enabled expert advice for our students on the "pseudo-real" scenario. By incorporating the experts' assistance, we aimed for explicit policy-making relevance.

Active discipline-specific learning

Our intention was to use the educational benefits of active experiential-learning scenarios through the use of inperson simulations that involved student face-to-face interaction, as differentiated from a computer-simulated activity. Active-learning simulations, particularly in the professions, have long been recognised as a valuable tool for learner-centred education. The literature is rich with reflections on the pedagogic, cognitive and motivational rationales for an active-learning approach. It has demonstrated extensive benefits for participants, including the acquisition of a broad and deep understanding of the subject matter (Brock & Cameron 1999; Krain & Lantis 2006; Rivera & Simons 2008); the increased likelihood of the retention of knowledge (Prince 2004); the development of empathy for others (Morgan 2003; Rivera & Simons 2008); and invaluable support to the teaching of international relations (Asal 2005). Further benefits include increased motivation and analysis, critical-thinking, communication and negotiating skills; greater depth in understanding; and practice in thinking beyond one's own experience (Lamy 2000; Asal 2005; Krain & Lantis 2006; Shellman & Turan 2006; Shinko 2006; Haack 2008; Krain 2010, Pettenger, West & Young 2014). It is also argued that knowledge arises not *from* experience but *in* the experience (Fenwick 2000). As Lave and Wegner (1991) and Lave (1988) claim, people learn through their interaction with the community and the means by which they engage at that moment of interaction.

Recent literature, however, has increasingly expressed the need for assessments of the simulation methodology that are more comprehensive and definitive (Krain 2005; Giovanello & Raymond 2010; Asal, Kollars, Raymond & Rosen 2013; Kirk & Kromer 2013). In response to these arguments, Baranowski and Weir (2015) analysed articles published in the *Journal of Political Science Education* between 2005 and 2013 on the subject of simulation pedagogy. They concluded that, while there exists a dearth of literature systematically evaluating simulation effects, there nonetheless is "a small but growing body of evidence [that] lends support to the contention that students who participate in simulations do in fact learn more than students not taking part in such exercises" (p.399). One such study, by Celeste Lay and Kathleen Smarick (2006), used both survey and control groups in evaluating political knowledge, and found that the simulation group made recognisable improvements to their knowledge base. It is also interesting to note Bernstein and Meizlish's (2003) findings from their longitudinal study that while there were few differences between control and experimental group findings immediately post-simulation, three years later the simulation group reported more understanding of political-science concepts.

Initially, our review of the literature on active learning in international relations informed our approach in scheduling two simulations within a knowledge-based curriculum (Haack 2008, p.395). Krain (2010) argued that the more students are engaged through a multiplicity of their senses (including, for example, reading,

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evaluating texts, hearing peer analysis and counterpoints, engaging in the problem definition, constructing potential solutions and acting out a role in this process), the more likely they are to have been involved in a "memorable event", and thus a more effective learning experience (p.296). To fully realise the benefits of simulations, a complex foreign-policy "reality" based on both real-life and hypothetical premises must be created to produce a "pseudo-real" scenario (Susskind & Corburn 1999; Susskind 2014). Similarly, more-valuable learning takes place where students encounter ill-structured and open-ended real-world problems where they must define the problem and decide how to proceed, given a range of options. (See Ebner & Efron 2005; Savery 2006; Krain 2010; Crampton & Manwaring 2014.] Ebner and Efron (2005) point to the effectiveness of "pseudo-real" simulations to create scenarios that are credible as real-world events while avoiding an already-known foreign-policy process and outcome. The literature also reveals how these accrued benefits of problem-based learning research can be situationally dependent. Krain (2010) reported that students also felt scenarios were more effective than a case-study methodology, which essentially relied on written case texts, as students felt more immersed and "invested in the case" when working with the scenario (p.305). With respect to the discipline-specific opportunity for students to experience the workplace, Lawrence Susskind (2014) noted that simulations

can be used to give students a chance to experience situations in which they might someday find themselves, offering a quasi-realistic chance to apply what they have learned in class. When used properly, with the help of skilled instructors, role-play simulations can be very effective educational tools (p.12).

Susskind also argues that a safe environment must be constructed for the students to feel comfortable so that they are willing to experiment within their learning environment (Susskind 2014).

The enhancement of professional competency in a disciplinary context

The second of our aims was to promote the development of students' professional competencies and specific skills within an academic disciplinary context. Recent higher-education research has identified that universities have encountered difficulties in promoting professional skills, measures to do so have been inadequate and/or external opportunities remain insufficient. Thus our rationale was to develop simulated work-integrated learning experiences to develop graduate competencies and skills. While in the Review of Graduate Skills the authors argue that there is a shared lack of understanding and consensus as to what are effective strategies for graduate skill development and how these skills are best fostered and developed (Rigby et al. 2010), Kek and Huijser (2011) argue that "problem-based learning is a powerful pedagogical approach that produces learning that has the potential to address higher education institutions' perceived current failure" in this area (p.338). It is also evident that graduate awareness of the need to "value-add" to their degree by enhancing their personal and behavioural credentials is on the rise (Tomlinson 2008). As identified in a 2008 work-integrated learning scoping study, experience-based learning helps students to engage more deeply as they create meaning from content knowledge in an applied professional environment. It provides direction for career choices, an understanding of workplace culture and a relevance that drives deeper learning (Patrick, Peach, Pocknee, Webb, Fletcher & Pretto 2008). Work-integrated learning, therefore, is not just about developing skills: it can transform the learning experience for the student, and entails a wider range of personal development and experiential learning. Complementing technical skills gained through more-traditional academic education with welldeveloped practical skills enables students to contribute quickly and fully to their own development. However, to develop these skills, students need more than just exposure to the workplace. They must grasp the nature of the skill, be provided with guidance as to how to develop it and be given the opportunity to practice the it (Cosgrove 2011, p.355).

Thus, this foreign-policy initiative aimed to address the need to develop professional competencies and specific skills within the foreign-policy disciplinary context. These professional competencies are the behaviours, skills and attitudes required for success in the foreign-policy workspace; the skills themselves are the specific learned proficiencies to perform a particular function. In the course, professional competency was defined as the successful understanding and navigation of a foreign-policy crisis and the production and presentation of responsive policy advice. The specific skills required in this setting include: the application of foreign policy knowledge; critical thinking and analysis; identifying relevancy and priorities for a hypothetical crisis as situated within a broader international-relations context; effective communication and collaboration with peers in the problem analysis and in the design and negotiation of a policy response; cognitive and behavioural flexibility to adapt to the deliberate and organic development of the situation; independent and collaborative reflection on developments; the ability to assume responsibility; responding to time pressures; and the evaluation of one's personal and professional approach.

This approach is also found in a broader North American literature that responds to the development of professional skills (Asal 2005; Lay & Smarick 2006; Baranowski & Weir 2015). In responding to the intelligence failure relating to the terrorist attacks in New York on 11 September 2001, Shellman and Turan (2006) state: "We wish to develop students to invent new solutions to novel problems. Our goal as educators is to develop techniques to teach content in ways that also develop critical and analytical thinking, problem solving, and life-long learning skills" (p.21), together with "a capacity to know when and how to apply them" (p.21). Loggins (2009) also argues that students can use the critical thinking and analytical skill development acquired through complex, multifactorial problem-solving learning in future non-classroom settings; similarly, Horn, Rubin and Schouenborg (2016) argue for the development of critical and analytical thinking through their simulations.

Implementing the simulation

This experiential-learning simulation was implemented as a deliberate learning tool embedded in a strong, scaffolded framework (Haack 2008). Prior to 2007 the subject, Australian Foreign Policy, had been taught in the traditional lecture and tutorial system. Since 2007 the subject design has embedded two intensive half-day simulations, scheduled four weeks apart across a semester curriculum or one week apart in an intensive curriculum, with the second simulation more complex in nature. The simulations incorporate direct experience of Australian foreign-policy problems, professional practice and graduate employment selection strategies. The students were grouped into working teams of seven to undertake evaluation of an emerging crisis, as if they were part of a Department of Foreign Affairs and Trade (DFAT) crisis team, and they prepared responses and advice within in a set timeframe. The simulation was designed so that students could identify, analyse, negotiate and respond to a "pseudo-real" foreign-policy crisis. The teams analysed written and verbal information provided to them in a staggered manner that was suggestive of a foreign-policy crisis. They were required to identify the crisis and its accompanying international and domestic political considerations. Thus the teams needed to work collaboratively to identify the entirety of the problem before they worked on advice for an appropriate government policy and media response. At the end of this first section the advice was presented to a DFAT official. At each simulation an industry practitioner was present to provide expert knowledge during the simulation, to answer questions and provide advice and feedback on the team presentations. Industry representatives and staff provided interim feedback to each team on their analysis, policy advice and presentation at each stage of the scenario. Complications were added as the scenario progressed. At the end of the second analysis session, the teams again presented their advice to the experts. The groups were initially offered the opportunity to introduce themselves to the experts and test their advice. In this way we aimed to enhance the credibility of the scenario for the students, and to enhance the pertinence of their learning.

As noted earlier, high-fidelity simulation is vital in providing a workplace-like experience, but it should not be so "real" as to constrain analysis and policy options to conform with the already-known outcomes. As different members of a workplace crisis team will bring different knowledge, not all members of the group were provided with similar information. The simulations were conducted verbally, as much of the information provided to a crisis-centre team in the first instance in a real-life situation is reported verbally. Additionally, the time in which the students could analyse and formulate policy advice was compacted during the course of the simulation.

As part of the competency-related preparation for the first simulation, students were introduced to the structure and actions of a crisis response team within DFAT. A policy practitioner, usually a DFAT official, provided a presentation on the DFAT structure and procedures for managing a foreign-policy crisis. After working through the identification and analysis of the crisis and the construction of policy advice, the groups then presented their policy advice. From here the policy practitioners and foreign-policy staff provided feedback on the foreign-policy content and suggested other analyses and policy options if they were not identified and discussed by the students. As this course placed the students at the centre of their own learning, students' discovery was very much part of the presentation and debriefing process. Staff guided the students through this process.

The second simulation was conducted four weeks later. Consistent with a sequenced and graduated learning process, the simulation involved a more intensive and complex simulation that more comprehensively replicated the workplace. This timeframe also enabled students to reflect on their learning from the first experience and consider how they might improve in the second situation. In the time between the two simulations students were provided with academic and practical literature to prepare for their next simulation challenge.

For this second simulation we involved high-profile foreign-policy experts who volunteered their time to work with the groups. We continued to engage these respected foreign-policy experts to communicate the gravitas of

the work at the international level, and the seriousness of this scholarly pursuit. (Their presence also increased the pressure on many students.) This group of visitors has included ambassadorial-level officials, former Defence Ministers, ministerial policy advisors, naval officers and regional institutional experts. In all but one year between 2008 and 2015, the state DFAT Director participated in the simulations. All experts freely gave their time. The debriefing process again took place across both the discipline-specific and professional competencies. The experts discussed the nature of the crisis and the foreign-policy options, reflecting on both the groups' advice and their own understanding and preferences. In doing so, they highlighted the consequences of specific policy decisions.

Commensurate with Cosgrove's research findings (2011) that prior to practice, students need to grasp the nature of a skill and receive guidance as to how to develop the it, staff from the university's Careers and Employment Liaison Centre identified the non-technical skills valuable in this setting and advised as to how to foster these skills. This was conducted as a preparatory session prior to the simulation. The discussion of the skills was also linked to the university's identification of graduate attributes. We also emphasised that this was a risk-free situation for students, as we had chosen not to summatively assess students' simulation performance; this gave participants the liberty to experiment as they acquired the skills without consequences in terms of academic grades.

As one of our concurrent aims was the acquisition and development of professional skills, students were also asked to reflect on the degree to which they had acquired and could demonstrate the skills (Asal 2005, p.363). Part-way through the conduct of the simulation, we interrupted the process to ask the students to step back and reflect on: (a) the group's approach and their individual role within the group relative to the subject content, and (b) their demonstration of the requisite professional skills. In addition, in 2015, the Careers staff offered each student an individual review of their professional behaviour, based on the staff members' observations of the students demonstrating particular skills:

Using results of analysis to develop advice and recommendations

Dealing with sensitive information with thoughtfulness, caution, ethical conduct and risk avoidance

Being alert and aware of changing information

Efficiently and effectively communicating own ideas to others under pressure

Taking personal responsibility in meeting team objectives and progressing work

Responding to group decisions where the individual may not agree with others

Responding realistically to time pressures

Capacity to communicate decisions to external parties

Applying a sound understanding of foreign policy.

Dual-strategy simulation: evaluation

Evaluation methods

To evaluate the simulation strategy, we gathered ongoing qualitative feedback from students, tutors, and industry participants from the project's inception in 2007. The feedback requested related to both aims of the project. Prior to that, the authors - two staff members who have conducted and been immersed in the simulations since 2007 – observed and discussed changes in student behaviour after the reflection period contained within each simulation and between the two simulations.

Feedback was also sought from the following groups:

- a) Four tutors who provided written and verbal feedback on the simulation about the relevance of the scenario, the application of knowledge and demonstration of professional skills; and
- b) Six industry experts on the legitimacy and relevance of the "pseudo-real" scenario and the utility of the approach.

In 2015 we also employed a quantitative approach to understand student learning more fully. In this process, 30 students provided responses to the questionnaire process, as documented in the following section. We designed and administered the questionnaire to provide feedback in evaluating the effectiveness of the achievement of the course aims and to support the identification and reflection for student knowledge and skill in the professional competency. We used:

a) An evaluation questionnaire provided to students at the outset and conclusion of the simulation. This incorporated open-ended questions so as not to restrict responses. Examples included:

How do you think you will go working in a group with this unknown task/exercise?

What are you hoping to develop through this exercise?

What was the most valuable section/aspect?

Was the experience similar to your expectations? Or, if there were some differences in the experience, what were they?

b) A quantitative self-reflective survey. Questions in this survey included:

Rate your knowledge about or skill in:

Using results of analysis to develop advice and recommendations

Dealing with sensitive information with thoughtfulness, caution, ethical conduct and risk avoidance Being alert and aware of changing information

Efficiently and effectively communicating your own ideas to others when under pressure

Taking personal responsibility in meeting team objectives and progressing work

Responding to group decisions with which you may not agree

Responding objectively to time pressures

Capacity to communicate decisions with external parties

Applying understanding of foreign policy

If faced with a similar scenario or situation in the future, what are three things you would do or approach differently?

Surveys were conducted both before and after the simulation. The survey combined used a five-item Likert-type scale during both pre-test and post-test evaluations; the post-test also incorporated a retrospective evaluation. This combination of evaluations was created to enable an evaluation of the impact of response-shift or self-shift bias on the graduate assessment of discipline-specific knowledge and professional competencies (Rockwell & Kohn 1989; Howard 1980). A response-shift bias can refer to the change in the personal standard of measurement, in this case of a behaviour, which may alter as a result of learning. Our reasoning was that students using self-report evaluation tools may inaccurately self-assess baseline behaviours in pre-test and posttest evaluations due to their lack of practical experience with competency requirements prior to a program. A retrospective post-test may prevent students from inaccurately assessing baseline behaviours, and provide a more accurate measure of program impact (Rockwell & Kohn 1989). In their analysis of the evaluation in an international-studies intensive summer program, Moore and Tananis (2009) argued that a retrospective pre-test may be more useful in providing a more accurate measure of capacity baseline, and thus in providing a better estimate of the magnitude of change in these situations. Nonetheless, we do acknowledge the subjective nature of these types of evaluation, and the impact of the many and varying potential biases (Posavac 2016). Considering this, the combination of the use of pre- and post-event and retrospective evaluation can reduce the likelihood of a range of factors that could contribute to differences in pre- and post-tests such as maturation, history and test effects (Marsden & Torgerson 2012).

Results

Staff observations

In the initial years 2007 and 2008, the simulations were conducted only once during the semester. However, staff were concerned that the learning from the first scenario needed to be embedded in a replication of the activity. Hence, from 2009 onwards, two simulations were scheduled. Since that time, the overarching observation made by staff is that students' performance in the application of their foreign-policy knowledge and in their skill development has tended to improve between the first and second simulations.

It also became evident that more preliminary work was required to prepare students for their role and the behaviours necessary to improve their performance. The staff clearly needed to identify, explain and, in some cases, demonstrate the skills required. Similarly, time was needed to debrief students more completely regarding both the foreign-policy components of the simulation and the review of skills demonstrated. For example, in relation to their knowledge of diplomacy, experts and staff have reiterated that endeavours to de-escalate "crises" are critical, and the maintenance of stability needs to be a key outcome in the crises provided. When advice of this nature was presented by the teams in the first simulation, it was recognised and discussed by both

staff and industry experts. After this, many teams incorporated it into their advice in the second simulation who had failed to do so in the first.

Similarly, in the professional context, students began to analyse their own behaviour, such as the nature of their contribution to the group. For example, students who demonstrated dominating behaviour tried to be more thoughtful and considerate of other group members. This last example is a significant one, as it supports staff observations that the most prevalent problem in the group dynamics was a lack of self- awareness on the part of a dominant personality in restricting contributions from other group members, and in turn the more "passive" students' difficulty in responding effectively to the dominant behaviours.

Tutor feedback

Tutors provided valuable initial insights into the compilation of teams, and the workings of the process. With their knowledge of students, tutor feedback was particularly helpful in improving individual and group performance. They also provided remarks on the value of the experiential learning in the generalist degree. Comments included:

I can confidently assert that the skills in analysis, critical thinking, prioritisation, decision-making, collaboration, and policy development that these particular learning activities help students to develop are invaluable. (Tutor 2014)

It was fantastic to see students grapple with complex problems, present a succinct response and, for some, operate outside their comfort zone. (Tutor 2011)

In the recent past, one former tutor has provided very helpful feedback emphasising the importance of alignment of the policy advice with DFAT's institutional mission.

Industry feedback

The ongoing commitment and involvement of the high-profile experts is evidence in itself of the quality and importance of this learning and teaching method. It adds legitimacy and relevance to the experience for the students. Their observations demonstrate the value of the insights into the workings of government:

[The scenarios] motivate students to work cooperatively in small teams, absorb and assess information they receive as the crisis develops and devise and deliver verbal presentations of their responses at each stage of the crisis. A real strength of the simulation is the invited involvement of Foreign Policy practitioners to tell students about the foci of Government concerns in international crises, the mechanisms it establishes in response and the documentation it produces. (Industry participant 2012-13)

[T]his stimulation of curiosity in students into the "Australian" whole of government approach to International Relations was impressive. (Industry participant 2011)

Student feedback

We analysed the commonalities of the feedback with respect to the major aims of this teaching initiative: the discipline-specific and professional-competency learning. Overall the feedback has been particularly positive. The following sections include students' comments since 2007 and the 2015 quantitative results on their discipline knowledge and workplace and professional competencies.

Discipline knowledge

Student comments:

Being put into the "hot seat" and having simulated discussions about the government approach to international situations was a valuable learning experience and provided an understanding of the complexities faced by officials in the real world. Having practical understanding adds significantly to the overall learning experience, especially in a largely theoretical area like international relations. (Student 2009)

[I]t allowed us to be creative in our decision making and problem solving using knowledge acquired throughout the topic. (Student 2008)

[I]t neatly combines aspects of academia, professional development and industry engagement in a way that benefits all parties involved. (Student 2012)

[The scenarios were] an invaluable insight into the machinery of foreign policy decision-making. I feel the experience has helped me better comprehend the complexity of such issues. (Student 2009)

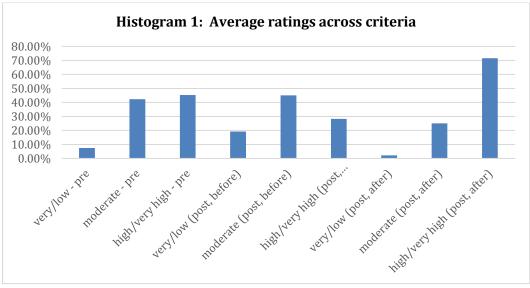
[The scenarios were] a practical application of our learning – it made me think differently. (Student 2009)

[L]earning things in theory from a text is one thing, but learning to apply these skills in a practical environment is exciting and more realistic. (Student 2009)

Quantitative Results

In 2015 30 students provided self-assessments of their competencies. The first set of three columns on each of the histograms presents students' assessment of their competencies prior to the simulation. The second set of three columns again shows students' self-assessment of their ability prior to the simulation, but here the survey was conducted after the simulation. Here we attempted to record a more accurate baseline of student competency prior to the simulation. The third set of columns records students' assessment of their learning once the simulation was complete.

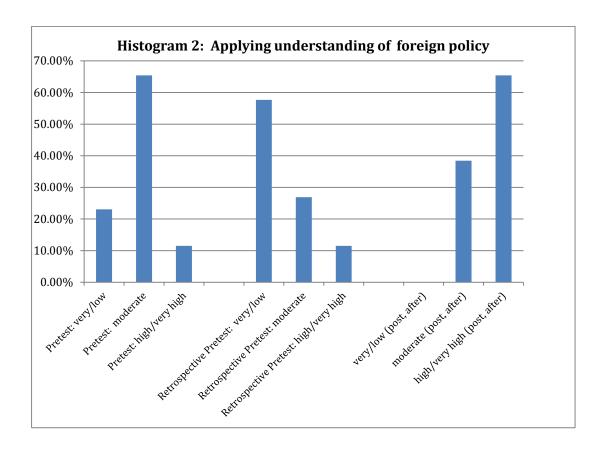
Although it represents a relatively small sample on which to base significant quantitative evidence of the impact on competency development, it marks the introduction of quantitative data collection for the project and establishes a baseline for continued comparisons in future delivery. We also note the subjectivity of self-assessing competency capacity. Generally, the difference identified in the ratings indicated a response-shift effect, with more students assessing their professional competency prior to the simulations as either low or very low. Once they had participated in the simulations, students were more aware of the demands of particular skills, and subsequently often revised their assessment of their competency level down in the retrospective test to reflect a better understanding of the demands. The third set of columns reveals students' post-simulation evaluation of the impact of the guided learning in the simulation on their level of competency. Although this was seen in the majority of criteria, it was not the case in all criteria. It was evidenced with students rating between high and very high, or low and very low, but not as significantly for those rating their competency level as moderate. This may be equated to individuals' rating and a central tendency of judgement where "given a range or group we tend to form our judgements around the median value of the series" (Hollingworth 1910).



Histogram 1 presents the overall average ratings across all competency criteria in the pre-simulation, retrospective and post-simulation surveys.

Histograms 2 through 5 provide a selection of student evaluations of their competencies. For each competency, students rated their ability as improving after the activity.

Histogram 2 presents students' self-assessment of their capacity to apply an understanding of foreign policy as measured by the quantitative pre-simulation, retrospective and post-simulation surveys.



Following Howard (1980), Rockwell and Kohn (1989) and Moore and Tananis (2009), the questionnaire results in Histogram 2 indicated that the simulation experience allowed students to more accurately gauge their capacity baseline with respect to their ability to apply discipline-specific knowledge. After the simulation, they also self-assessed that they were more able to apply their foreign-policy knowledge.

Workplace and professional competencies

The following comments are indicative of student reviews of the experience with respect to the development of workplace and professional competencies.

Student comments:

[M]y ability to be flexible and to adapt to new tasks and information in the workplace was enhanced because of these sessions. I would recommend them for any student looking for work in the public sector. (Student 2010)

[A]llowing undergraduate and postgraduate students the opportunity to mix with foreign policy experts and government officials greatly enriched our learning and degree experience. The hypothetical was an engaging and stimulating learning experience which improved our ability to work cohesively in a team. (Student 2011)

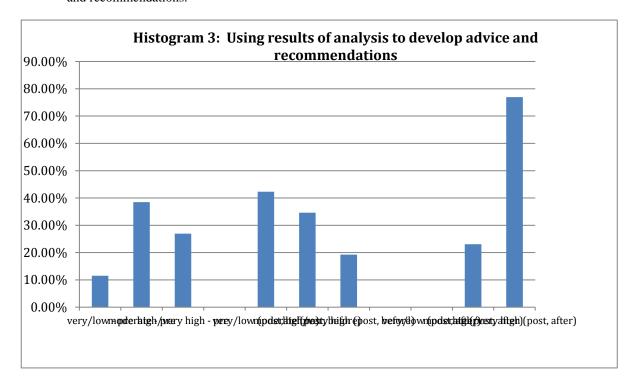
[S]kills are integrated with learning and events like these mean graduates are equipped to make the transfer to the professional context. (Student 2011)

I found the exercises particularly helpful when applying for work – for example experience preparing talking points helped me secure employment. (Student 2011)

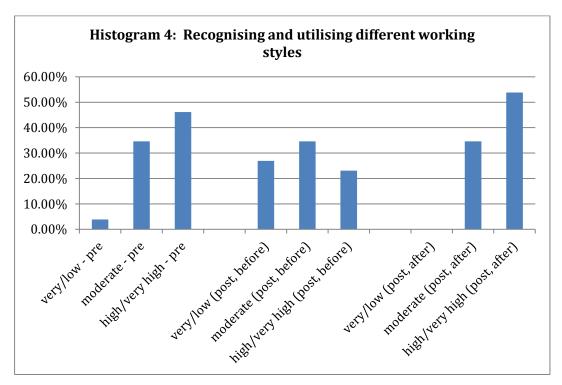
Quantitative Results

As with the discipline-knowledge quantitative results, we have presented the results in the following histogram form. Of the 10 competencies students were asked to self-assess, we have presented three sets of results for discussion.

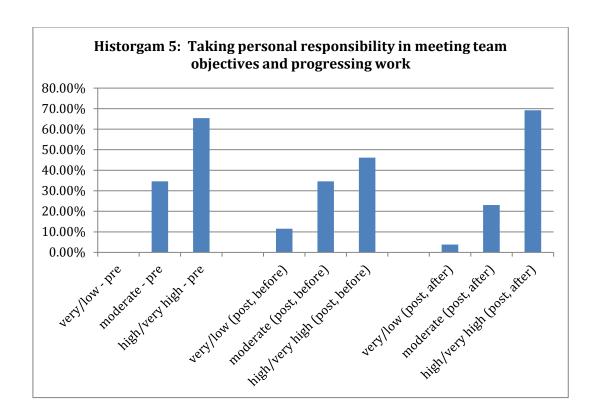
Histogram 3 shows students' self-assessment of their ability to use results of analysis to develop advice and recommendations.



Histogram 4 shows students' self-assessment with respect to recognising and using different working styles.



Histogram 5 represents students' self-assessment with respect to taking personal responsibility for meeting team objectives and progressing work.



This data shows students' assessment that there was improvement in their application of discipline knowledge and professional skills in using results of analysis to develop advice and recommendations; recognising and using different working styles; and taking personal responsibility in meeting team objectives and progressing work. For each of the presented behaviours and competencies, the results show that students rated their knowledge and/or skills more highly after the simulation than. Similar to the discipline-specific survey, the presimulation, retrospective and post-simulation surveys indicate that students perceive their baseline capacity differently once they have participated in the simulation. Their participation required them to do more than cognitively reflect on their skills: they needed to demonstrate them; as a result, they became more intimately aware of their own capabilities. The most marked change across the four areas was that students felt that their capacity to apply foreign-policy knowledge and use results to construct policy advice and recommendations was most effectively improved during the simulation experience. Students also noted improvements in their capacity to recognise and use different working styles. Of the three surveys pertinent to the professional competency aim of the course, the results of the student survey revealed the simulation learning activity to be less effective in recognising and using different working styles. Clearly this is an area that requires more preparatory work in assisting students to identify various styles of work, how they can be used and how such variations can contribute to advancing the group functionality and task achievement.

Learning and development

In this project we have demonstrated that the simulation methodology can be used as an effective strategy for graduate skill development in tertiary institutions (Rigby et al. 2010). It also provides confirmation for Kek and Huijser's (2011) research, which postulates that problem-based learning can be a potent learning tool to tackle higher-education institutions' perceived shortcomings in this area. This study offered three key benefits: most students recognised improvements in their ability to apply discipline-specific understanding to foreign-policy issues; students recognised and demonstrated improved capacity in their professional competency, including the capacity to analyse material and formulate advice; and most students also understood the importance of taking personal responsibility for reaching team objectives. They were less able to recognise and use diverse working styles. That the most significant changes occurred in the two areas demonstrating the use of foreign-policy knowledge may also suggest that this is an area currently underdeveloped in teaching practice. In this university setting in the international-studies and arts degrees students have fewer opportunities to apply their knowledge, which reinforces Kek and Huijser's (2011) observations of university limitations in integrating critical thinking into the relevant context. Currently most students in generalist degrees learn and write but not "do" in an industry-calibrated intensive and experiential situation. Furthermore, in the simulation process as described here,

students' presentations require them to overtly demonstrate their application and use of their foreign-policy knowledge. The students experience immediate benefits in their improved ability to apply foreign policy; improvements in professional competency may be more obvious over time. One development that arises as a consequence is that more de-briefing time should be allocated to the analysis and discussion of these skills.

Our research has also provided support for our intention to simultaneously foster both discipline-specific and professional competency through an experiential simulation. This project's results support previous research that has found simulations to be effective educational tools (Susskind 2014; Krain & Lantis 2006; Asal 2005). We have also shown that a professional competency can also be fostered in an alternative work-integrated learning space for students may work after graduation in a sensitive diplomatic space. In this respect it mirrors the outcomes of studies by Leonard and Leonard (1995) and Shellman and Turan (2006) that simulations better prepare students for future workspaces. Fenwick (2000), Lave and Wegner (1991) and Lave (1988) have argued that student learning takes place within the experience. In this study we also showed through the pre-tests, retrospective pre-test and post-tests that students' understanding of their discipline and professional capacity arises from their experiences in needing to apply and use their knowledge and capacity.

Over the past decade we have increasingly understood that the quality and interactive nature of the introductory and debriefing sessions are vital to realise and legitimise the deep learning of the approach. Consistent with Cosgrove (2011), our students' performance in the professional competency improved where we allocated more teaching time to the identification and explanation of the skills. This very point also suggests that it may be worth prioritising the skills for development in this program. While the professional competency is broad, it may be that the remit of this program should identify this broad range but explain to students that it focuses on select skills for specific development.

Themes that were repeated in student feedback in the early years of the approach included the desire for more information and advice about DFAT procedures to manage crises. Specific qualitative student feedback since 2007 provided the impetus for the industry pre-simulation presentation on the DFAT approach to crisis management to be implemented in 2012. Second, staff took the view that students would benefit from individual feedback. When such feedback was offered in 2015, students were highly responsive. We have also incorporated preliminary advice on language and behaviour to improve how the teams function and specifically how to work with a dominant personality. Third, to foster student thinking and reflection on key knowledge and skills, the simulations have also incorporated more mid-point reflection, where students are instructed to stand back from the activity and consider their performance. At these times students are also guided to consider if they are working to include and listen to all group participants.

The value of industry participation is perennially present in student reflections. In addition to the provision of expert knowledge and understanding in the assessment of each "crisis" and of likely state behaviour and international-relations outcomes, the expert guests have often provided advice to refine the simulation construction (see Susskind 1999, 2014). Pertinent to this point, further preparation would emphasise the importance of alignment of policy advice with the organisation for which the "policy advisors" are working. Understanding the workplace mission is vital to producing analysis and advice consistent with that organisation.

Four aspects of the evaluation of the quantitative data should be reviewed in future studies. First, as students are voluntarily self-evaluating and this remains a subjective means of review, other reviews should be incorporated (Horn, Rubin & Schouenborg 2016). Second, it is also possible that students could have learned as much or more in an extended lecture session focusing both on content and skills (Horn, Rubin & Schouenborg 2016); to address this unknown, the use of a control group could be included (Shellman & Turan 2006). Third, other factors may have contributed to the learning environment (Gianovello, Kirk & Kromer 2013), although the retrospective pre-test marks one attempt to address this issue. Fourth, while qualitative feedback has been available from 2007, the quantitative survey data was only available for 2015. Ongoing collection of data can be used further in the evaluation of the program.

Conclusion

This paper has acknowledged that there is an acute need for universities teaching foreign policy and, more broadly, disciplines where the nature of work makes "real life" professional experiences for students problematic, to create innovative solutions so that students can experience professional practice. The dual-strategy simulation approach provides for an alternative work-integrated learning experience, even where opportunities for students enrolled in large cohort generalist degrees are limited. Consequently this dual-strategy

experiential-learning initiative provides students with the opportunity for discipline-specific, problem-based learning and skills-building in a discipline-relevant practical situation. This approach demonstrates how alternative approaches to placements can be successfully incorporated into current teaching methodologies. A unique feature of these simulations has been the involvement of industry experts to enhance the legitimacy of the experience and to improve the relevance and the quality of the learning. This program is also an incipient measure to overcome the inequity of programs that can only place the best students to work with industry. A further development would be to encourage more employer engagement in the student groups and examine ways to improve the opportunity for professional and workplace culturalisation through the experience. We also suggest not only that the dual purpose can be achieved, but that it can extend beyond the Australian foreign-policy discipline to other disciplines within the generalist degree programs. It remains now for these disciplines to take up the approach researched here and test its validity.

These simulations demonstrate the potency of alternative approaches to traditional teaching and learning and work-integrated learning practices. They bring together academic rigor, professional industry skills, replication of real-world issues and processes and practice for professional employment selection methods, and provide students with the knowledge and practice to design a workable solution to ill-defined foreign-policy problems, in an organic, real-time, risk-free group setting.

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